

Practitioner's Docket No. 99CR108/KE

PATENT

AF 3661

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Owen, Gary L.; Barber, Sarah; and Palmer, George W.

Application No.: 09/391,782

Group No.: 3661

Filed: 09/08/1999

Examiner: R. Mancho

For: Method And Apparatus For Interactively Display A Route Window For A Flight Management System

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Assistant Commissioner for Patents  
Washington, D.C. 20231

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TRANSMITTAL OF APPEAL BRIEF (PATENT APPLICATION--37 C.F.R. 1.192)

1. Transmitted herewith, in triplicate, is the APPEAL BRIEF in this application, with respect to the Notice of Appeal filed on August 3, 2001.

2. STATUS OF APPLICANT

This application is on behalf of other than a small entity.

3. FEE FOR FILING APPEAL BRIEF

Pursuant to 37 C.F.R. 1.17(c), the fee for filing the Appeal Brief is:

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Date: October 2, 2001

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**4. EXTENSION OF TERM**

The proceedings herein are for a patent application and the provisions of 37 C.F.R. section 1.136 apply.

Applicant believes that no extension of term is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

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Appeal brief fee \$ 320.00

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**TOTAL FEE DUE \$ 320.00**

**6. FEE PAYMENT**

Charge Account No. 18-1722 the sum of \$ 320.00

A duplicate of this transmittal is attached.

**7. FEE DEFICIENCY**

If any additional extension and/or fee is required, this is a request therefor and to charge Account No. 18-1722. If any additional fee for claims is required, charge Account No. 18-1722.

Date: October 2, 2001

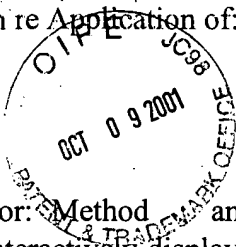
  
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Gary L. Owen et al.



For: Method and apparatus for  
interactively displaying a route window for  
a flight management system

Attorney Docket: 99CR108/KE

Assistant Commissioner for Patents  
Washington, DC 20231

Serial No: 09/391,782

Filed: September 8, 1999

Group Art Unit: 3661

Examiner: R. Mancho  
(703) 305-6318

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APPLICANT'S BRIEF ON APPEAL TO THE BOARD

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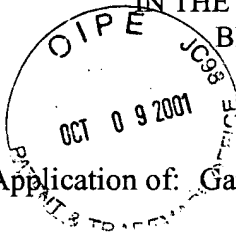
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND  
INTERFERENCES

In re Application of: Gary L. Owen et al.

For: METHOD AND APPARATUS FOR  
INTERACTIVELY DISPLAYING A  
ROUTE WINDOW FOR A FLIGHT  
MANAGEMENT SYSTEM

Attorney Docket: 99CR108/KE

Serial No: 09/391,782

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**APPLICANT'S BRIEF ON APPEAL TO THE BOARD**

This is an appeal from the final rejection of the Examiner dated May 3, 2001, rejecting  
Claims 2-6, 8 and 13-18, all of the claims in the case. This Brief is accompanied by the requisite  
fee set forth in §1.17(c).

**REAL PARTY IN INTEREST**

The real party in interest in this appeal is the assignee, Rockwell Collins Inc.

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**RELATED APPEALS AND INTERFERENCES**

The application on appeal is not subject to, or an element in, any other appeal or interference proceeding within the U.S. Patent and Trademark Office.

**STATUS OF CLAIMS**

Claims 2-6, 8, and 13-18 are currently pending in the application. All claims have been finally rejected.

Claims 2-6, 8 and 13-18 are on appeal.

**STATUS OF AMENDMENTS**

Amendment A amending claims 2, 13, 14, 15, 16, 17 and 18 was entered. Amendment B containing arguments and an Affidavit from Gary L. Owen was entered.

**SUMMARY OF THE INVENTION**

Now referring to Figure 2, and generally to pages 7-9 of the specification, and generally speaking, and without prejudice to the scope of the claims, the invention in the claims on appeal relates to: a display for showing textual route information in a size configurable route window 204. This size configurable route window can be configured to a larger size than that shown in Figure 2. See Figure 3, which shows the size configurable route window 204 after it has had its size configured to a larger size. The horizontal chevron 212 was selected to achieve this new

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size configuration. Similarly, Figure 5 shows the route window 204 of Figure 2 after it has had its size reconfigured in a vertical direction by selecting chevron 208. Finally, Figure 6 clearly shows the size configurable route window 204 of Figure 2 after it has been reconfigured in size in both vertical and horizontal directions by selecting both chevrons 208 and 212.

The present invention also includes buttons 206, 208 and 212 for configuring the route window 204. More specifically, display format parameter control button 206 gives the pilot control over the content of the information displayed in the route window (see lines 1-3, page 8). Vertical route window expansion/contraction variable direction double chevron button 208 and horizontal route window expansion/contraction variable direction double chevron button 212 have chevrons, which vary in direction based upon status of the window (see lines 10-end, page 8 and lines 106, page 9).

## ISSUES

The sole issue on appeal is as follows:

Whether the Briffe '498 reference anticipates the claims.

## GROUPING OF CLAIMS

Group 1 claims include claims 2-6, 8 and 13, which do not stand together.

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Group 2 claims include claims 14-17, which do not stand or fall together.

Group 3 is claim 18.

**ARGUMENTS FOR REVERSAL OF SECTION 102 REJECTION FOR GROUP 1  
CLAIMS**

The Examiner's rejection of all Group 1 claims based upon the Briffe reference under 102 is improper and is in error, because the Briffe reference does not teach a key claim limitation, and, therefore, fails to establish a prima facie case of anticipation, with respect to that key claim limitation.

The Applicants will now set out the errors in the prior art rejections. The Examiner states, in paragraph 2 on page 2 of the office action dated May 03, 2001, that Briffe discloses a configurable route window which has a configurable window size. The Examiner therein cites column 11, lines 5-7 of Briffe. The Examiner is misreading these cited sections of Briffe, which is set forth below:

*"However, the MFD can display several function pages thanks to a menu driven system. The surface of the screen is divided into six windows of 1/6 the total screen size. The **different** windows displayed will encompass a **total** size that is a multiple of 1/6 the available surface, i.e. 1/6, 1/3, 1/2, 2/3, 5/6, and 1 times the available surface. The horizontal situation is displayed on the part of the screen unused by the window(s) requested by the pilot. Furthermore, one MFD 18,20 includes a permanent*



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ENGINE/TRIMS display 120 which continuously occupies the top  
1/6 as shown in Fig. 9.” (Emphasis added)

A careful reading of this above passage will reveal that the sizes mentioned of 1/6, 1/3 ...etc. are not sizes of a configurable route window but are **cumulative sizes of the total number of fixed sized windows** that are displayed. The pending claims all call for a **size configurable route window**. In Briffe, all the windows have a fixed size of 1/6. Briffe, therefore, fails to describe a size configurable route window as is included in the claims. The Examiner appears to believe that Figures 9, 15, 16 and 22 of the Briffe reference show a configurable route window. This is not correct. The term “route window” is a term used in the art of avionics display systems to refer to a window of textual information only relating to a route. The term “route window” does not refer to a graphical map display, which graphical map shows a route. See the Affidavit from Gary L. Owen submitted on August 3, 2001. The term “route window” is used in the specification of the present invention to refer to item 204, the configurable route window. This use of the term is consistent throughout the specification as being a window displaying only textual information relating to a route. It is improper for the Examiner to ignore the meaning of these terms as they are used in the specification and in the literature (see the Owen Affidavit). It is also improper for the Examiner to ignore the Owen Affidavit.

Assuming for the sake of argument that the Examiner is correct when the Examiner contends that the map display of Figure 9 is a “route window”, then it becomes clear that the Group 1 claims are not anticipated, because they contain limitations to **BOTH** 1) a size configurable route window; and 2) an adaptive graphical map segment which adapts in size to a size characteristic of the route window.

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The map display of Figure 9 cannot be **BOTH** the claimed route window and the claimed “adaptive graphical map segment” which adapts to the size of the route window. In short, the map of Figure 9 is not a route window, and the Examiner is in error when making such contentions.

Claims 3, 4, 5 and 6 do not stand or fall together with claim 2 because they each contain additional limitations not taught in the Briffe reference. For example, claim 5 includes a limitation to a button having a *variable direction* double chevron expansion/contraction *indicating button*. This notion of such a *variable indicating/control button* is absent from Briffe. As stated in the summary of the invention above, the variable direction double chevron expansion/contraction indicating buttons have double chevrons that change the direction to indicate the result of clicking on such buttons; i.e. when the route window 204 is expanded vertically, the vertical expansion/contraction buttons change the direction of the vertically oriented chevrons to show that clicking on it will cause an upward contraction. It is clear that since Briffe does not have a size configurable route window, it would not have the indicating buttons which change to reflect the current (variable) status of the size of the route window. The Examiner ignores these limitations.

Similarly, claim 13 includes limitations to display format parameter control buttons, which are not shown in Briffe.

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**Arguments for reversal of Rejection of Group 2 claims**

The Group 2 claims are similar to Group 1 claims in that they contain limitations to both means for presenting a size configurable window of route information and a means for graphically presenting a map. Again as detailed above, Briffe fails to teach both elements of this combination.

**Arguments for reversal of Rejection of Group 3 claim**

Briffe does not teach adjusting the size of a “tabular textual section of FMS information”, in response to a selection signal related to a cursor. When every claim limitation is considered, it becomes clear that the Briffe reference does not anticipate the Group 3 claim.

**CONCLUSION OF ARGUMENTS**

When the proper meaning is applied to the claim terms “route window”, “window of route information”, “a display of FMS information in a tabular textual format”, it becomes apparent that the Briffe reference does not anticipate the claims. Additionally, there is no teaching to variable direction indicating button which expands/contracts a route window.

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For these reasons, the Examiner's final rejection of all of the claims should be reversed.

The Applicants believe that the application is in condition for allowance, and early notification of the same would be appreciated.

Respectfully Submitted,

October 2, 2001  
Date

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**APPENDIX: CLAIMS ON APPEAL**

2. An avionics FMS comprising:  
  
a source of FMS route data;  
  
a display coupled to said source of FMS route data for visually presenting said FMS route data;  
  
a configurable route window, presented on said display;  
  
said configurable route window has a configurable window size;  
  
said display presents an adaptive graphical map segment; and  
  
wherein said adaptive graphical map segment adapts to a sized characteristic of said configurable route window.
3. An avionics display of claim 2 wherein said configurable route window includes a vertical route window expansion/contraction button.
4. An avionics display of claim 3 wherein said vertical route window expansion/contraction button is a vertical route window expansion/contraction variable direction indicating button.
5. An avionics display of claim 4 wherein said vertical route window expansion/contraction variable direction indicating button is a vertical route window expansion/contraction variable direction double chevron button.

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6. An avionics display of claim 3 wherein said configurable route window includes a horizontal route window expansion/contraction button.
8. An avionics display of claim 7 wherein said configurable route window includes a plurality of display format parameter control buttons.
13. An apparatus of claim 5 wherein said configurable route window includes a plurality of display format parameter control buttons; and  
wherein each of said plurality of display format parameter control buttons includes a plurality of selectable regions thereon which are independently capable of being highlighted to indicate a selection status.
14. An avionics display comprising:  
  
means for presenting a size configurable window of route information relating to a predetermined route of an aircraft;  
  
means for graphically presenting a map relating to information relating to said predetermined route of said aircraft; and  
  
wherein said window is simultaneously presented with said map.
15. An avionics display of claim 14 wherein said means for presenting a size configurable window includes a first means for size adjustment of said configurable window.

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16. An avionics display of claim 15 wherein said means for presenting a size configurable window includes a second means for size adjustment of said configurable window.

17. An avionics display of claim 14 wherein said means for presenting a size configurable window includes a means for altering a content characteristic of said configurable window.

18. A method of adjusting a display of FMS information to a pilot comprising the steps of:

providing a display of FMS information in a tabular textual format in a section of an avionics display;

positioning a cursor over a predetermined position in said section and providing a selection input signal having a characteristic associated with said predetermined position;  
and

adjusting a size characteristic of said section in response to said selection input signal.